6671247

FIG. 1

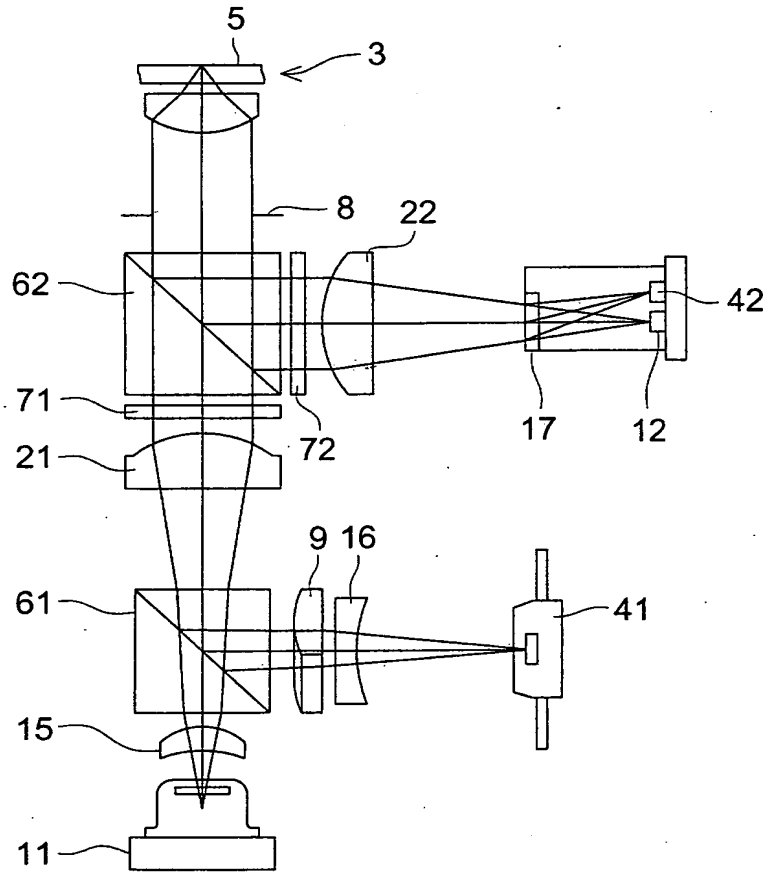


FIG. 2

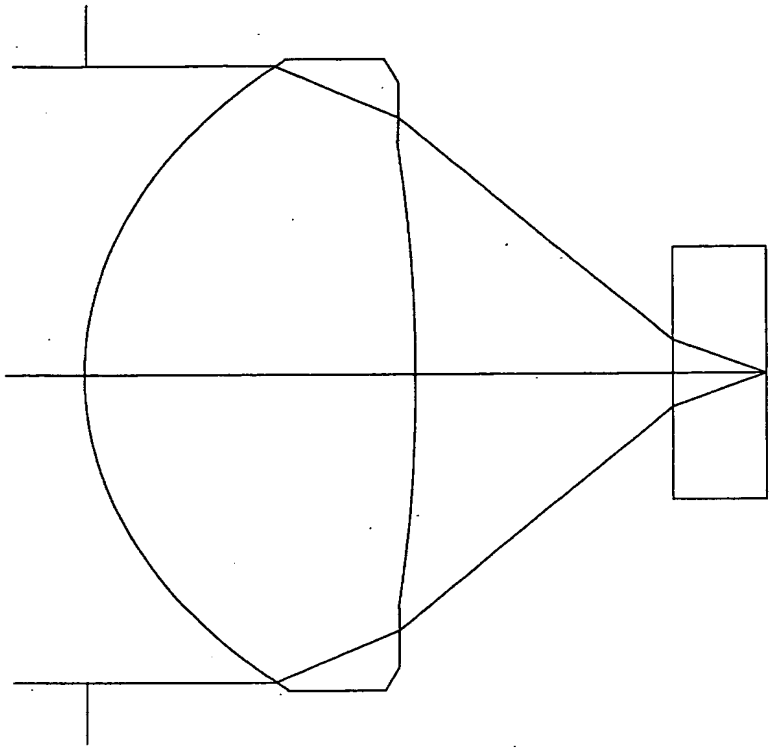
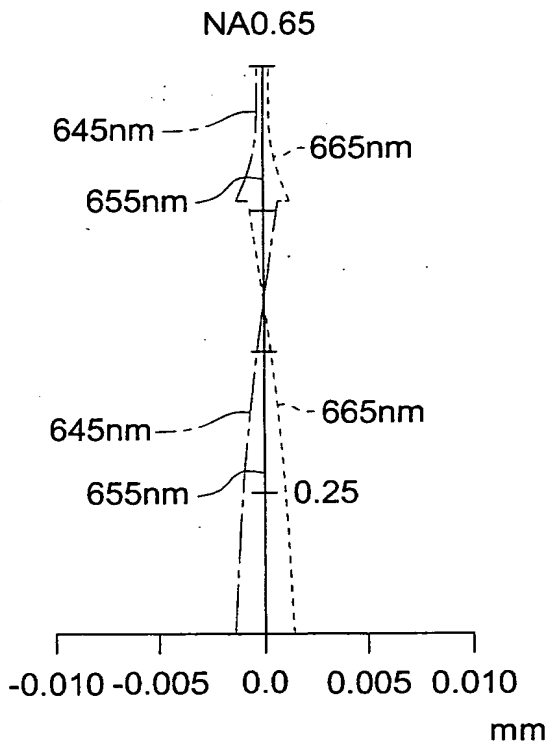
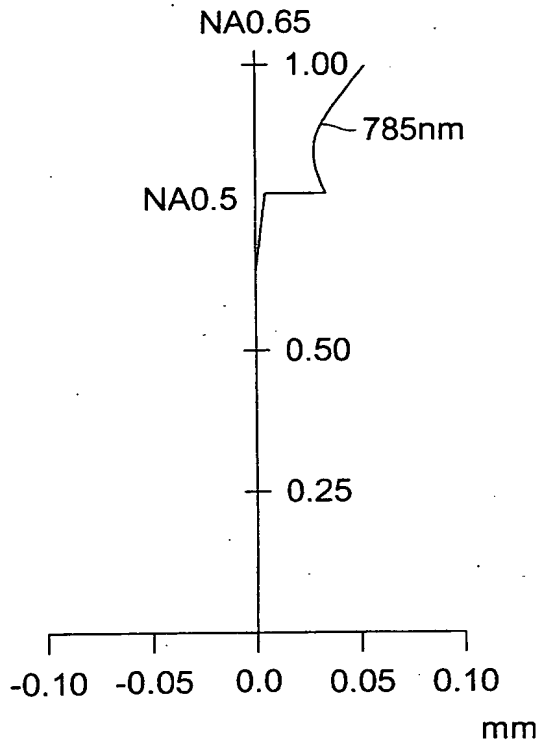


FIG. 3 (a)



SPHERICAL ABERRATION (DVD)

FIG. 3 (b)



SPHERICAL ABERRATION (CD)

FIG. 4

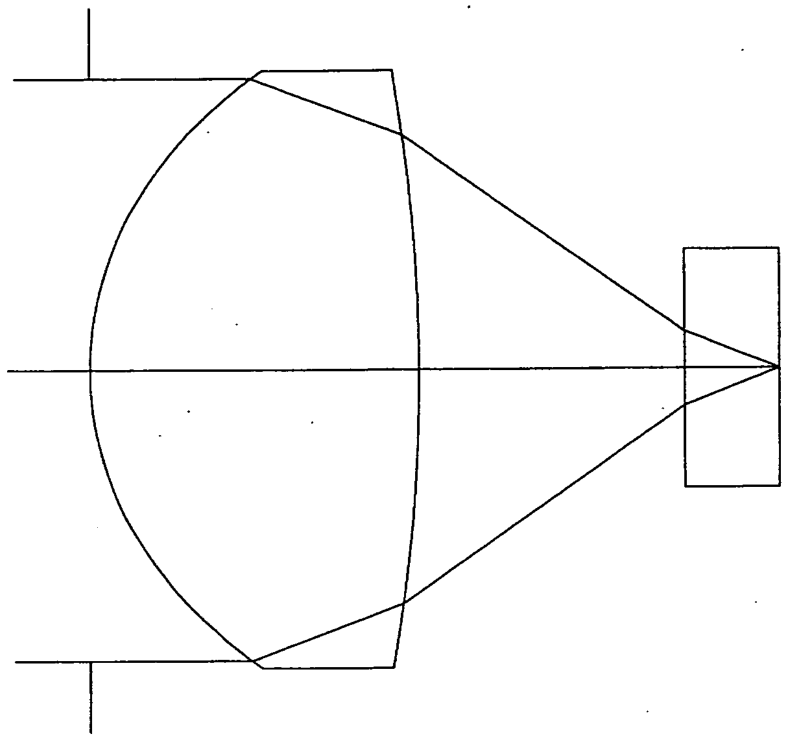
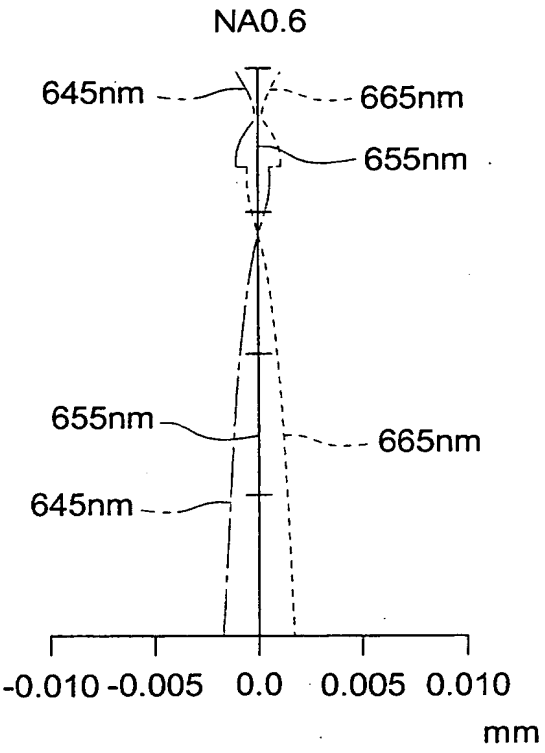
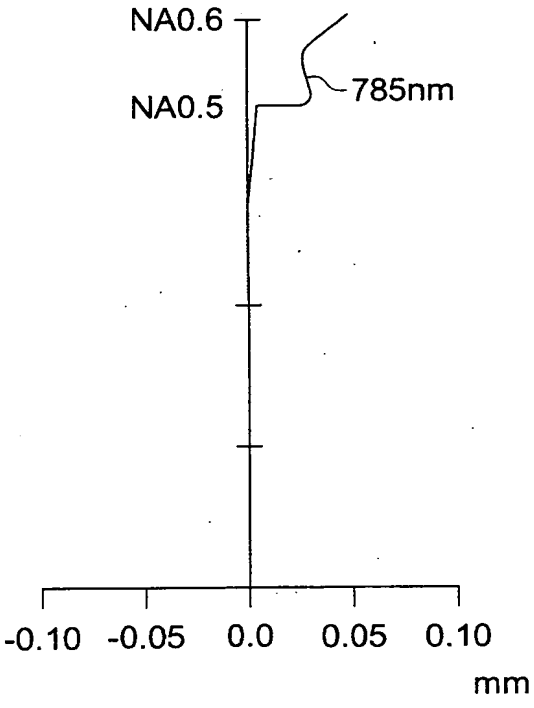


FIG. 5 (a)



SPHERICAL ABERRATION (DVD)

FIG. 5 (b)



SPHERICAL ABERRATION (CD)

FIG. 6

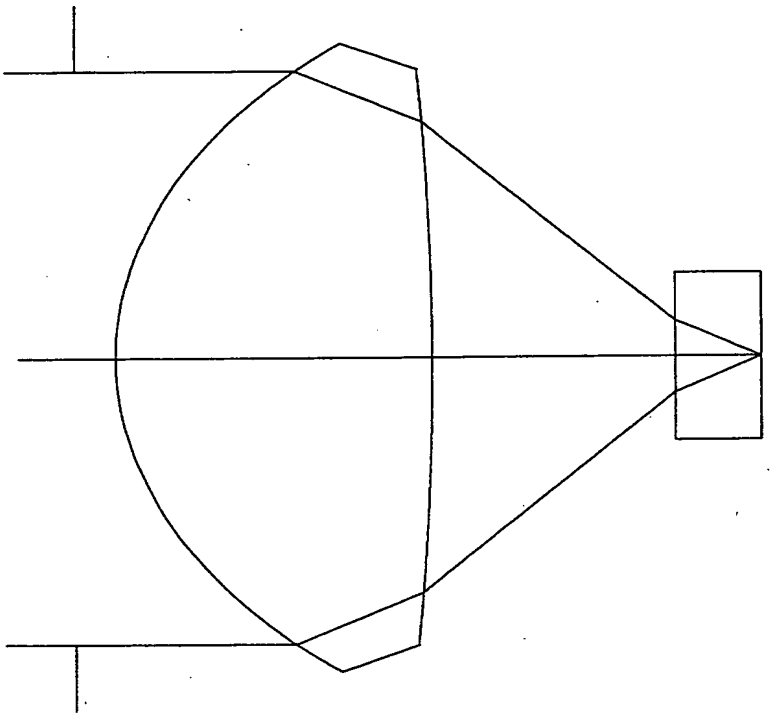
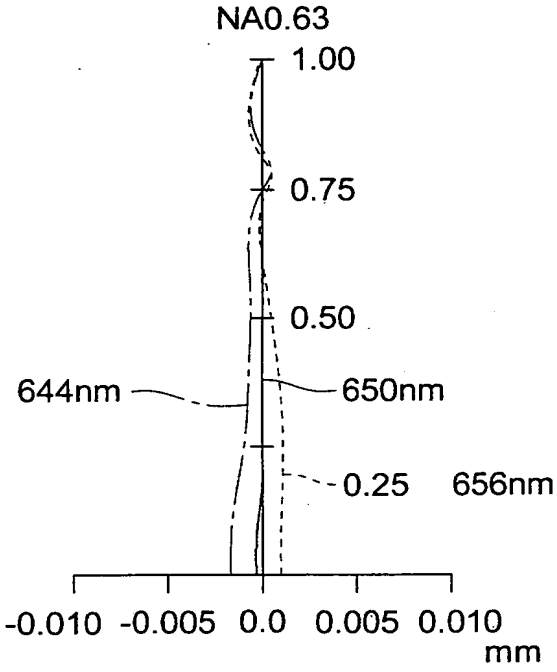
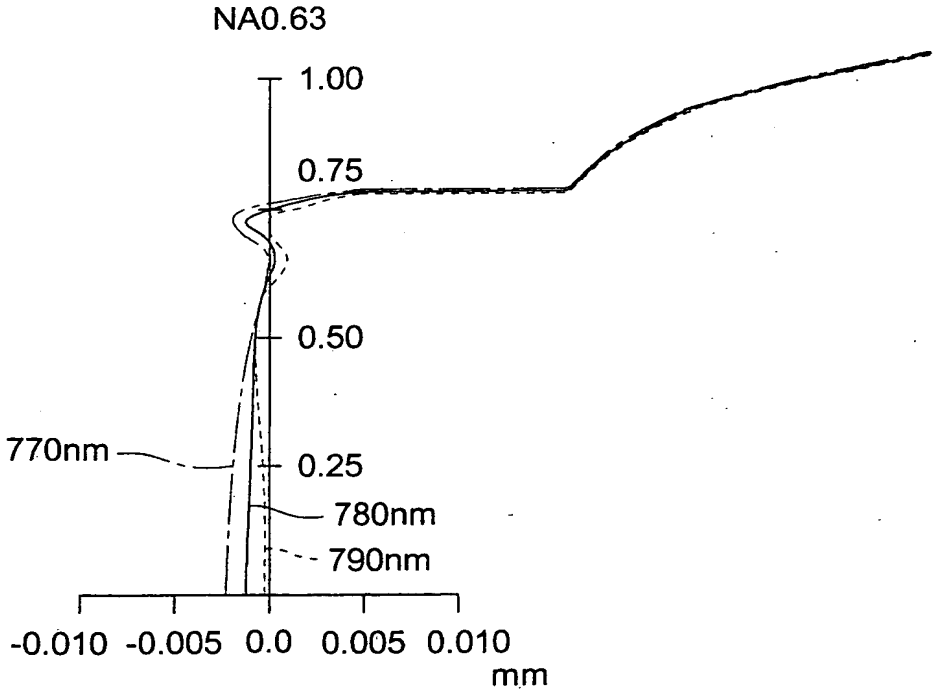


FIG. 7 (a)



SPHERICAL ABERRATION (DVD)

FIG. 7 (b)



SPHERICAL ABERRATION (CD)

FIG. 8 (a)

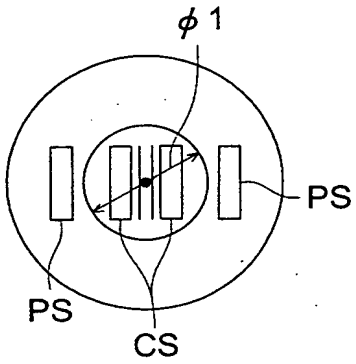


FIG. 8 (b)

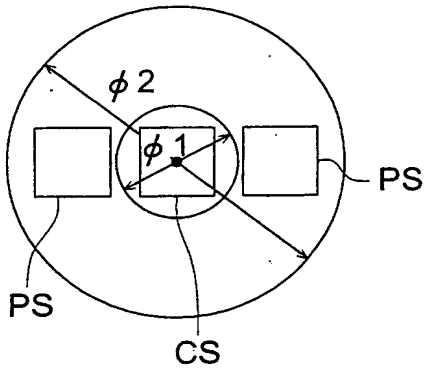


FIG. 9

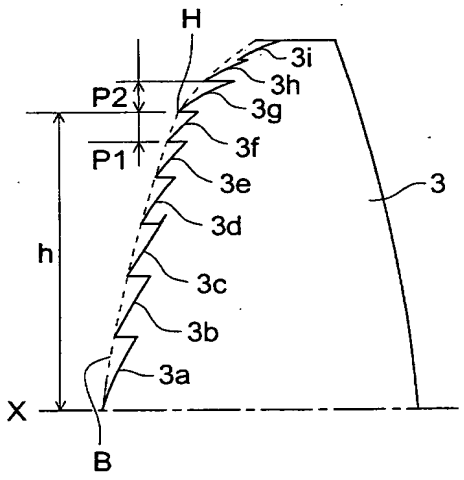


FIG. 10

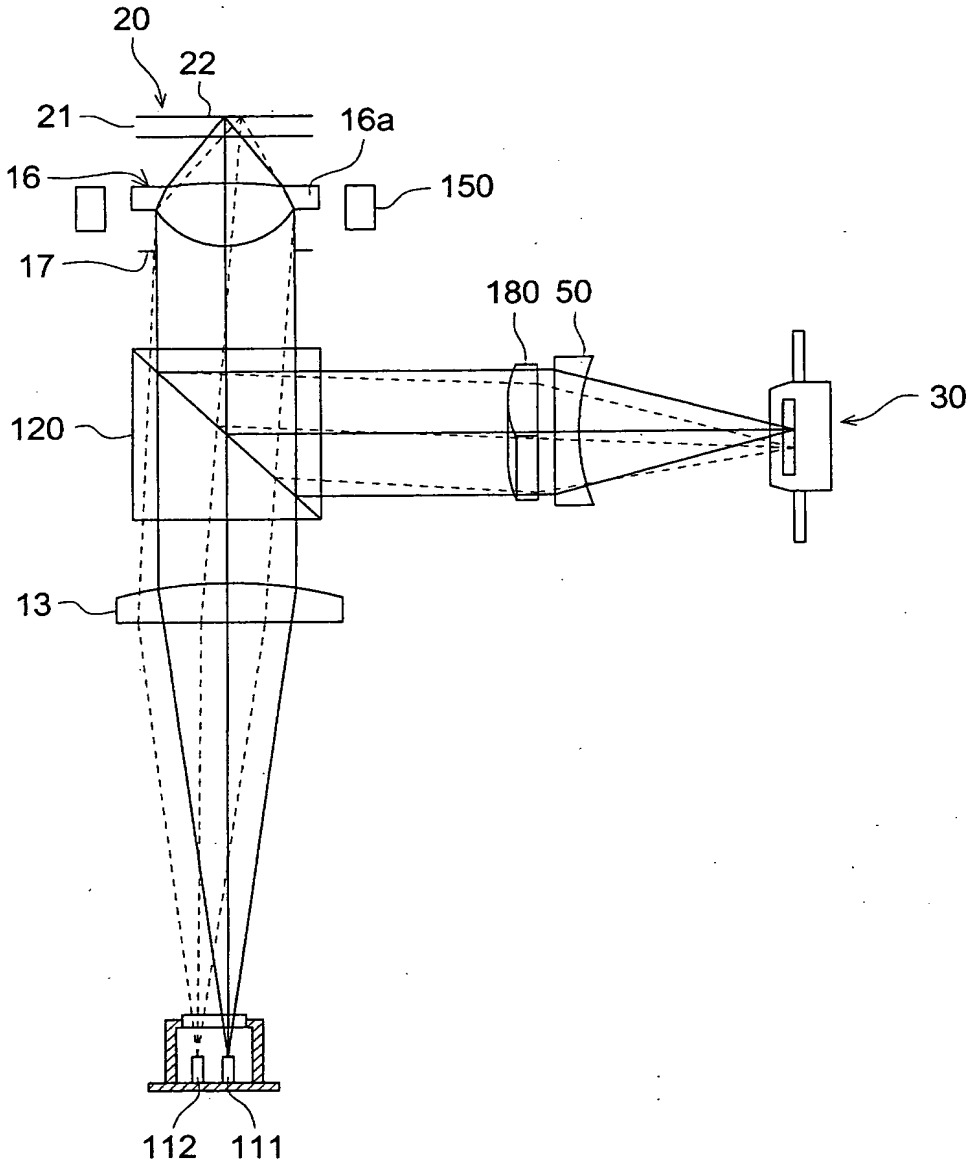


FIG. 11

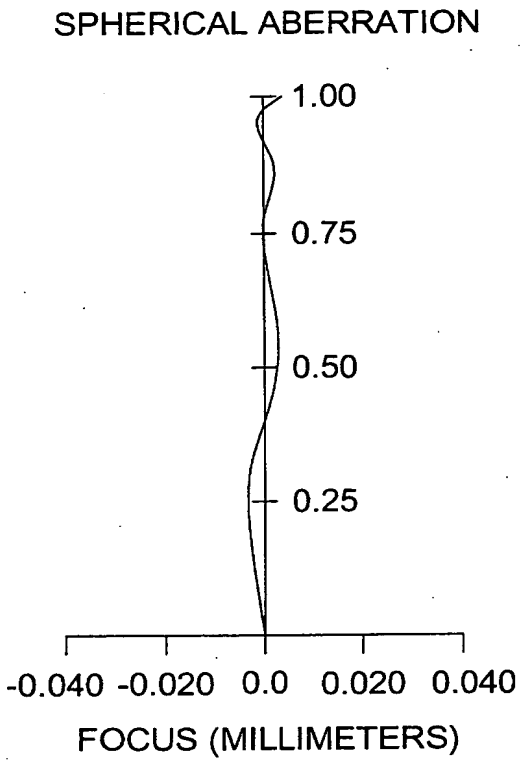
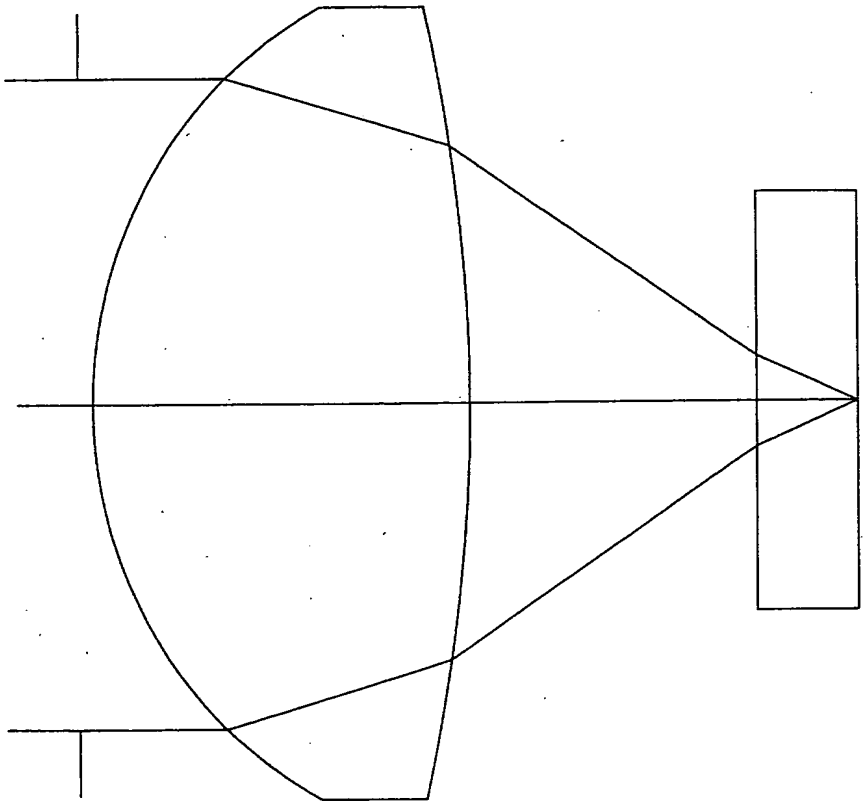

SPHERICAL ABERRATION
1.00
0.75
0.50
0.25
-0.040 -0.020 0.0 0.020 0.040
FOCUS (MILLIMETERS)

FIG. 12



λ = 650mm
t_1 = 0.6mm

FIG. 13

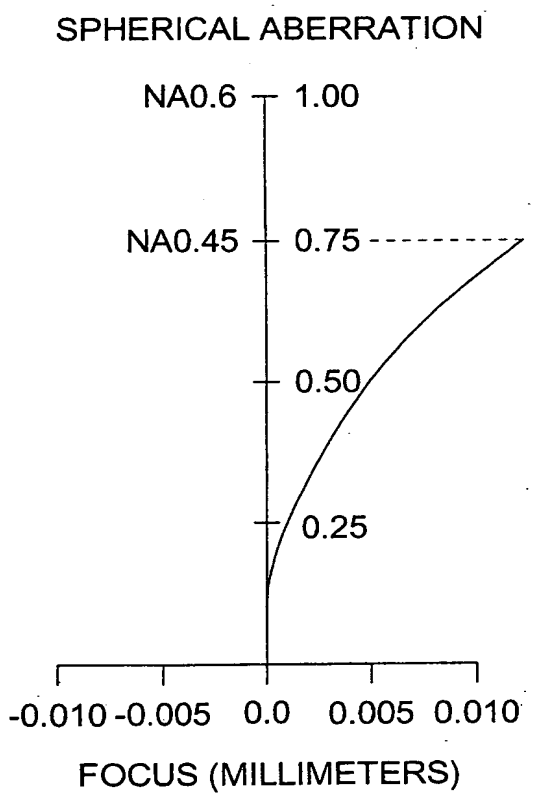

SPHERICAL ABERRATION
NA0.6
1.00
NA0.45
0.75
0.50
0.25
-0.010
-0.005
0.0
0.005
0.010
FOCUS (MILLIMETERS)

FIG. 14

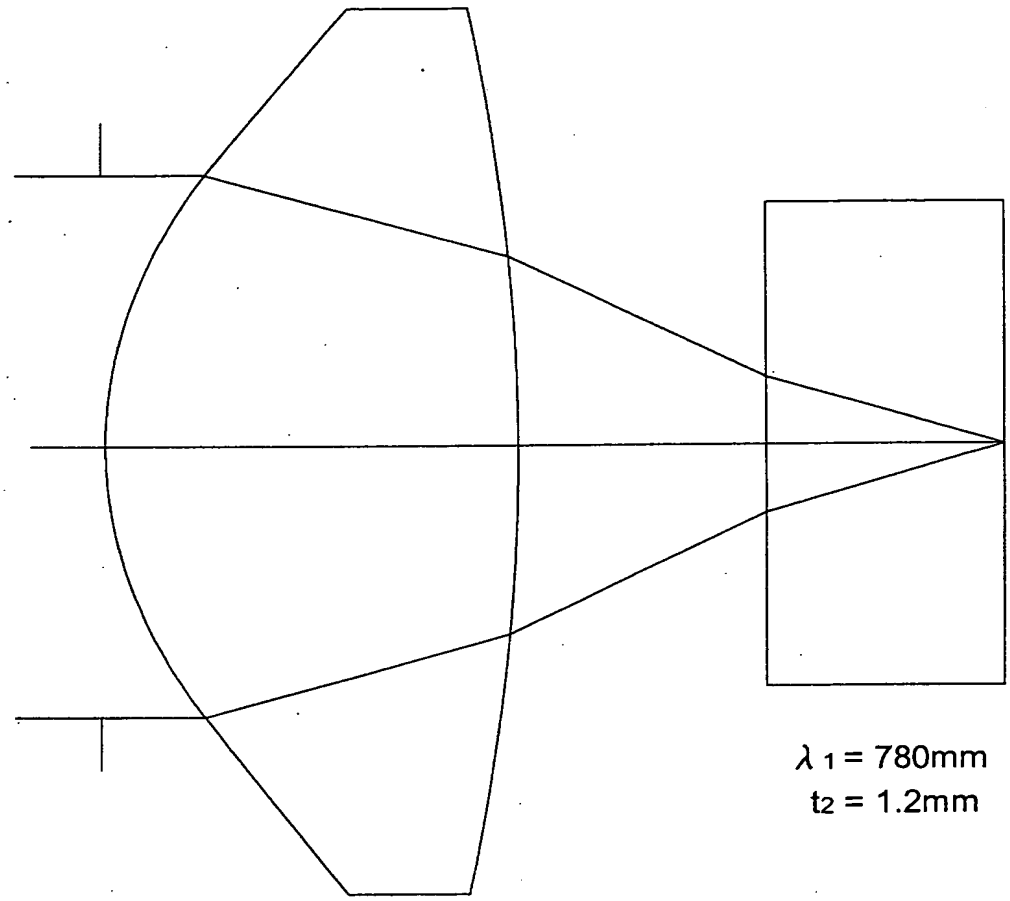


FIG. 15

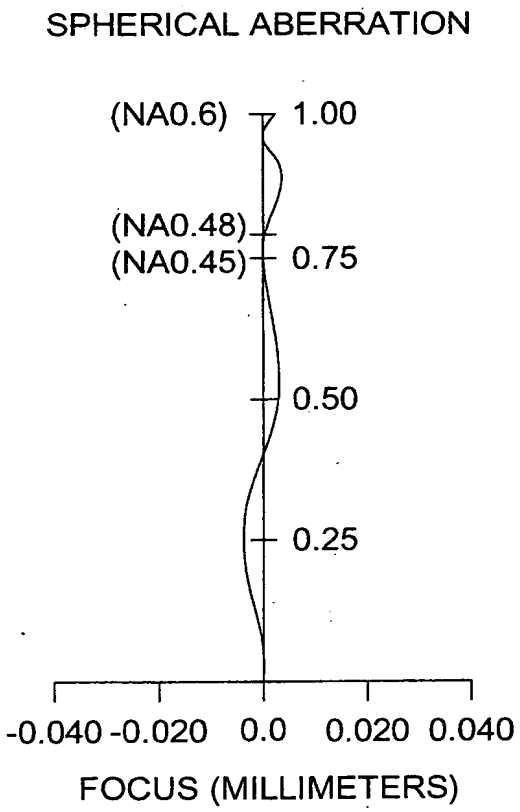

SPHERICAL ABERRATION
(NA0.6)
1.00
(NA0.48)
(NA0.45)
0.75
0.50
0.25
-0.040 -0.020 0.0 0.020 0.040
FOCUS (MILLIMETERS)

FIG. 16

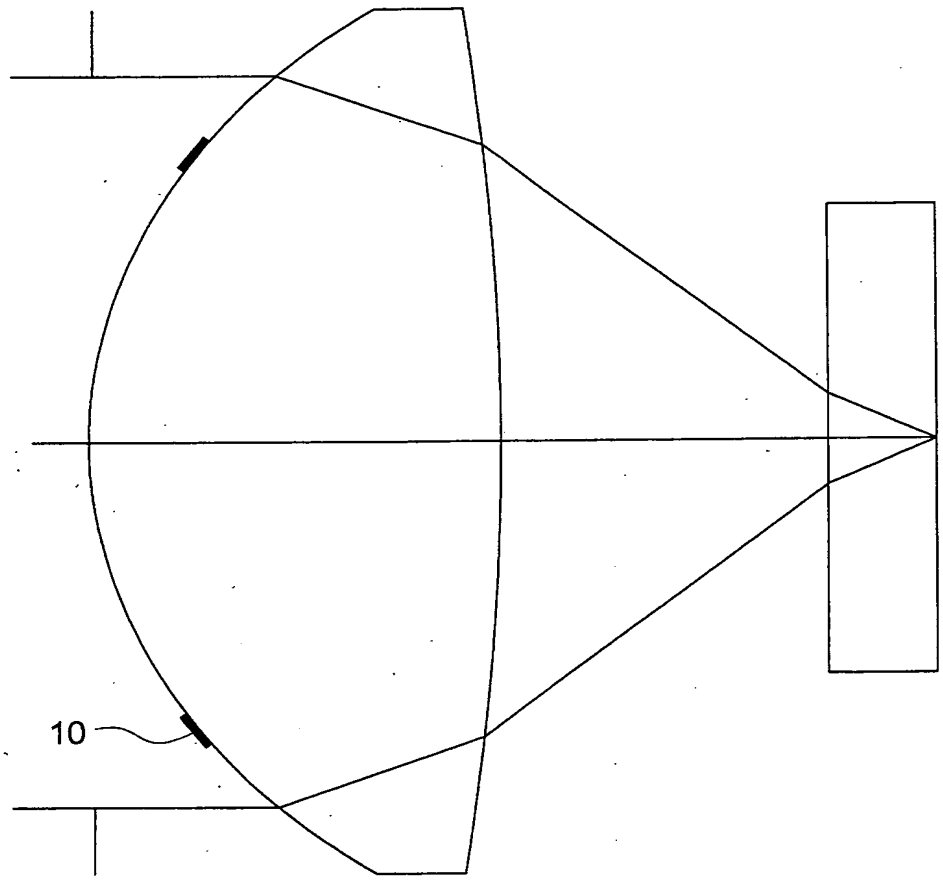


FIG. 17

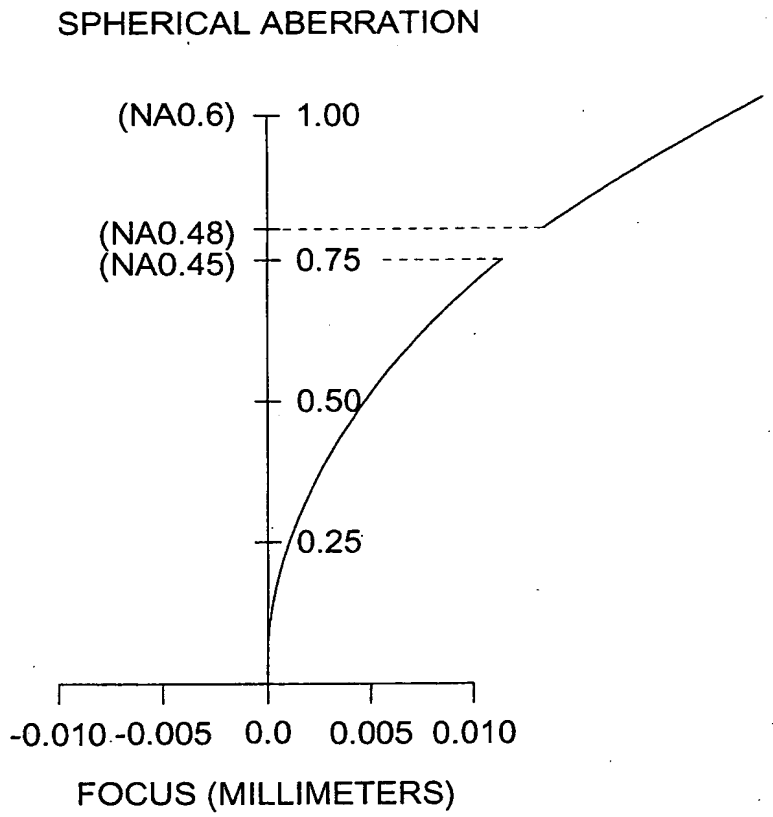

SPHERICAL ABERRATION
(NA0.6)
1.00
(NA0.48)
(NA0.45)
0.75
0.50
0.25
-0.010 -0.005 0.0 0.005 0.010
FOCUS (MILLIMETERS)

FIG. 18

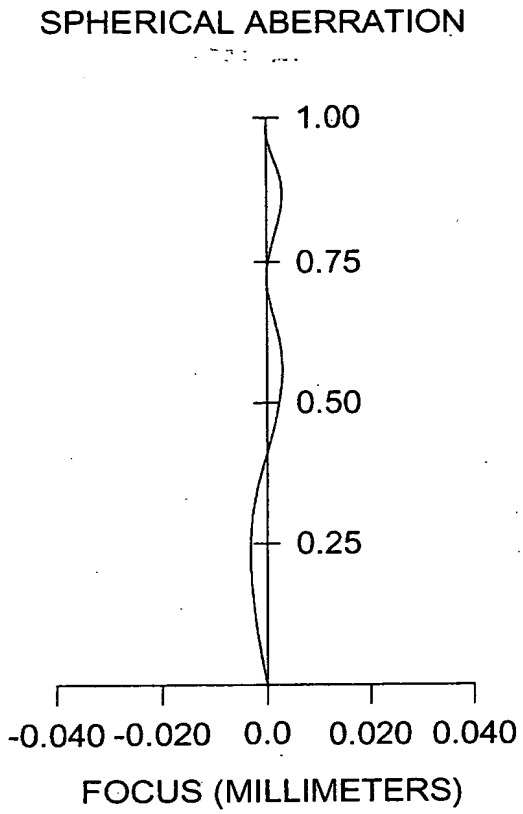
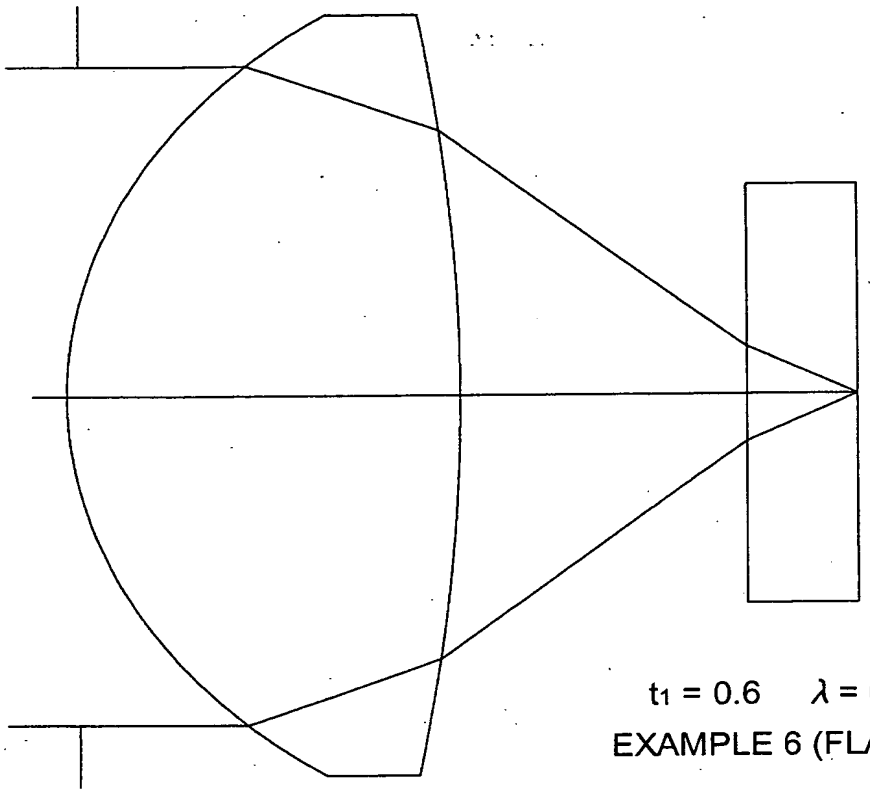

SPHERICAL ABERRATION
1.00
0.75
0.50
0.25
-0.040 -0.020 0.0 0.020 0.040
FOCUS (MILLIMETERS)

FIG. 19



$t_1 = 0.6$ $\lambda = 650nm$

EXAMPLE 6 (FLARE TYPE)

FIG. 20

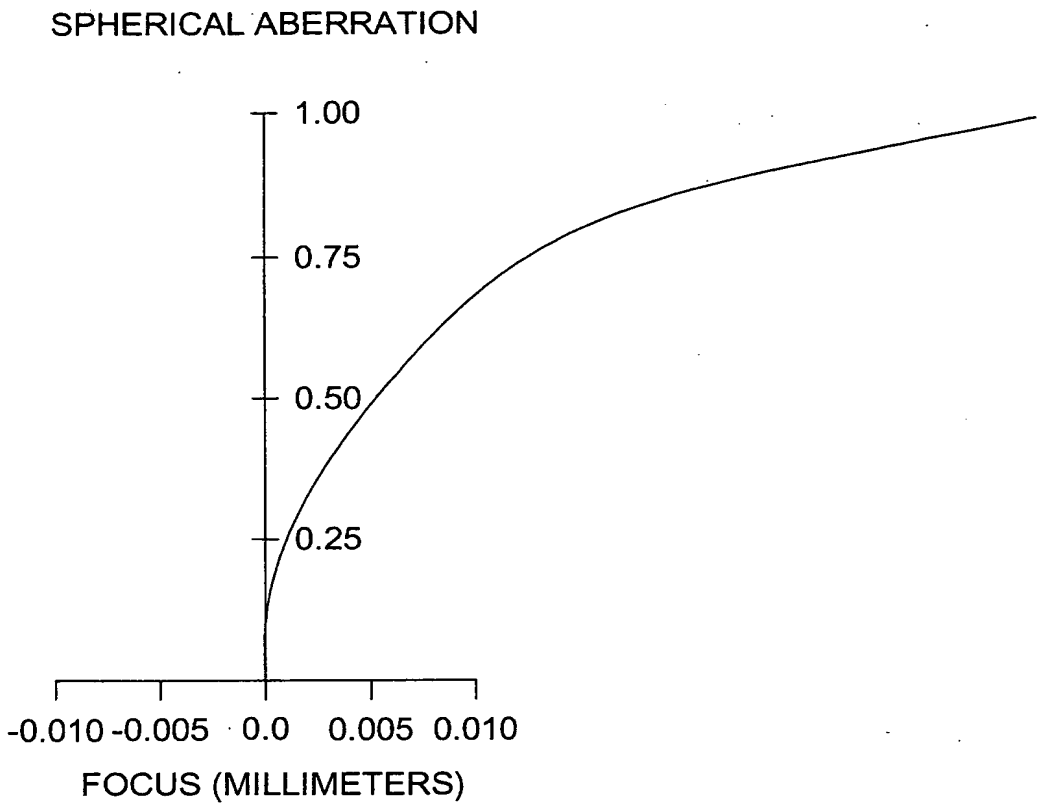

SPHERICAL ABERRATION
1.00
0.75
0.50
0.25
-0.010 -0.005 0.0 0.005 0.010
FOCUS (MILLIMETERS)

FIG. 21

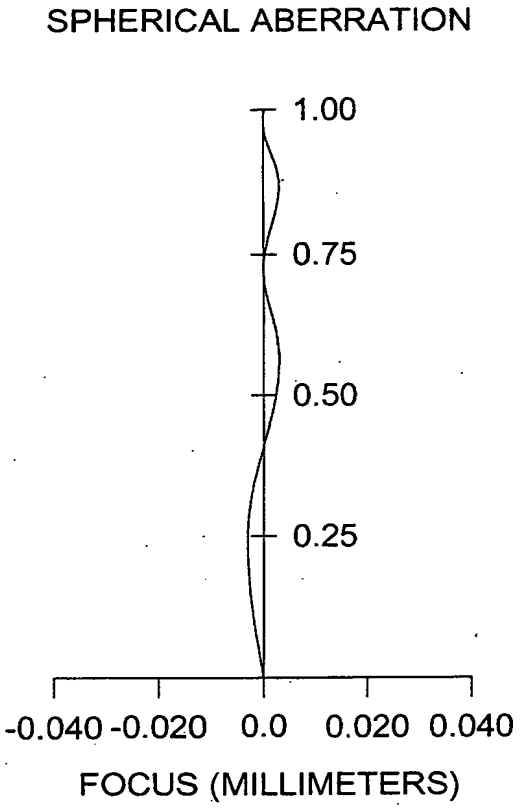
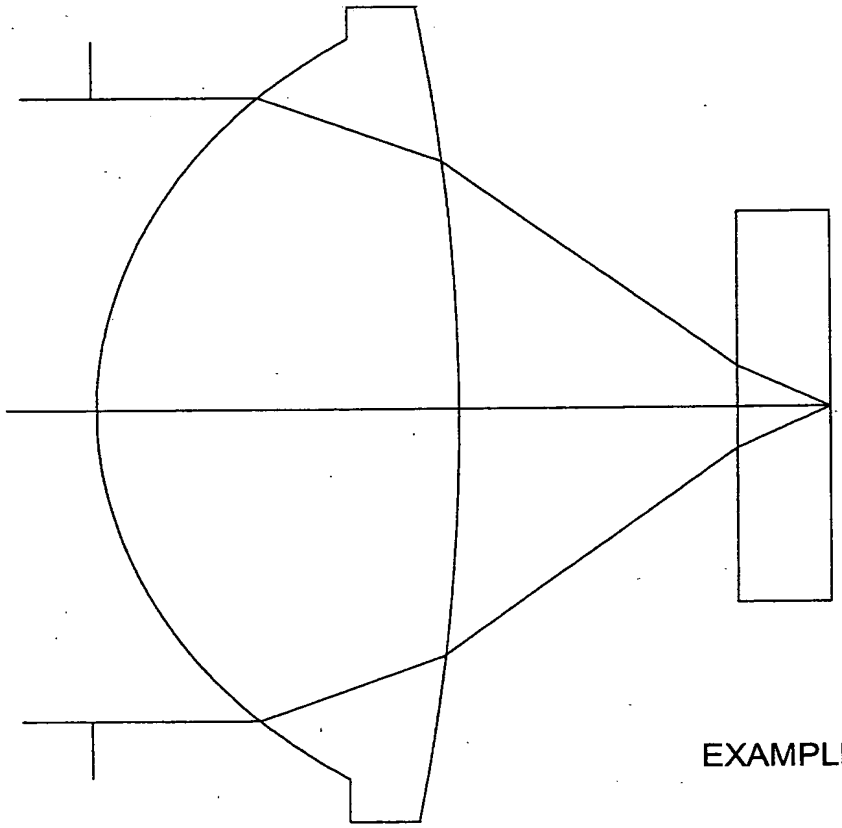

SPHERICAL ABERRATION
1.00
0.75
0.50
0.25
-0.040 -0.020 0.0 0.020 0.040
FOCUS (MILLIMETERS)

FIG. 22



EXAMPLE 4

FIG. 23

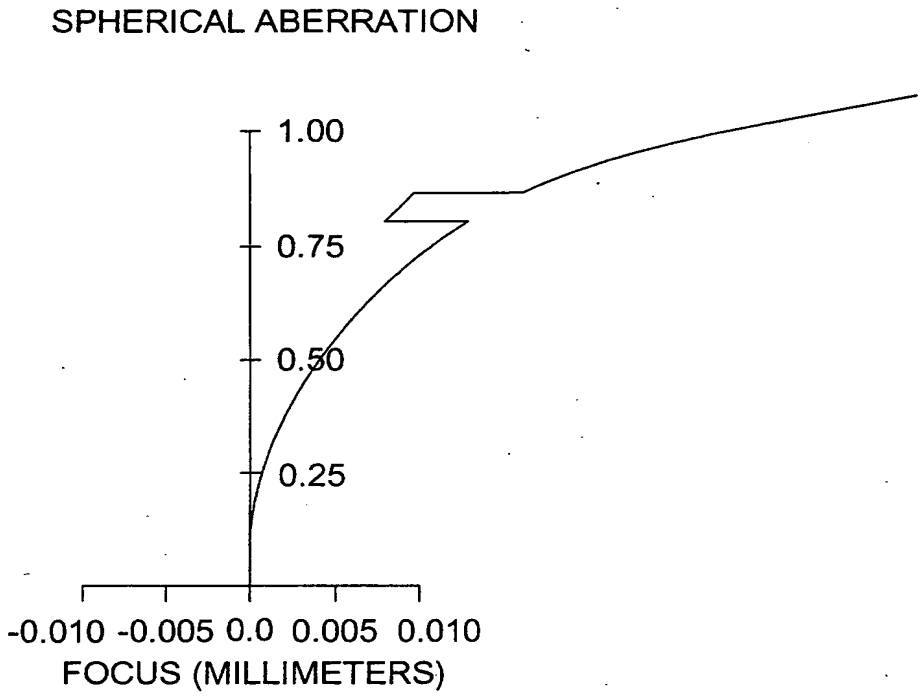

SPHERICAL ABERRATION
1.00
0.75
0.50
0.25
-0.010 -0.005 0.0 0.005 0.010
FOCUS (MILLIMETERS)

FIG. 24

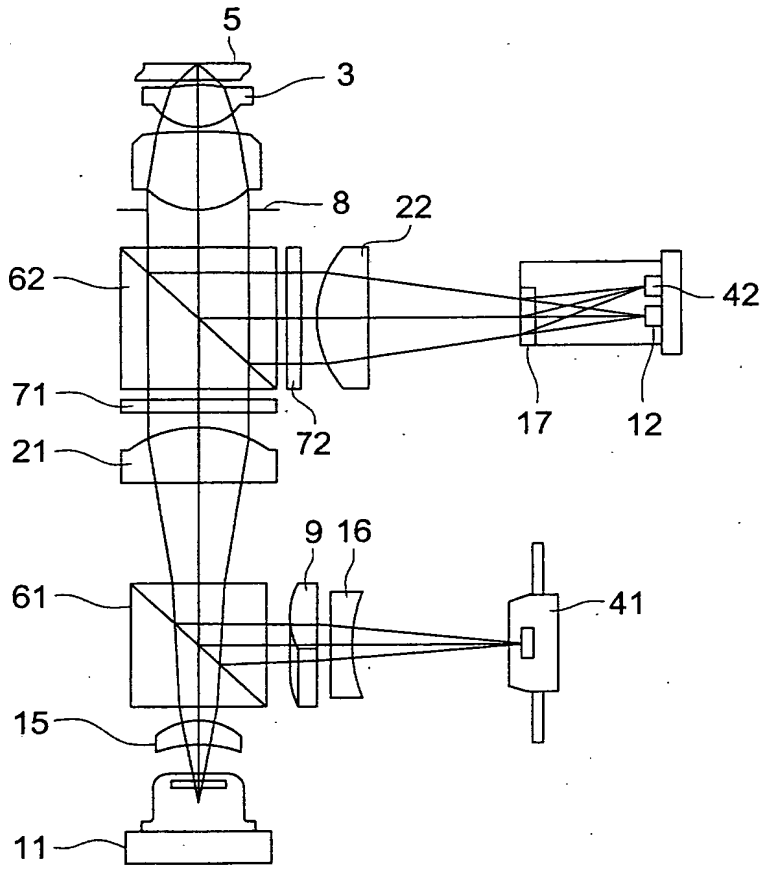


FIG. 25 (a)

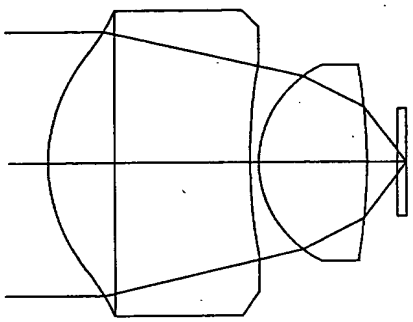


FIG. 25 (b)

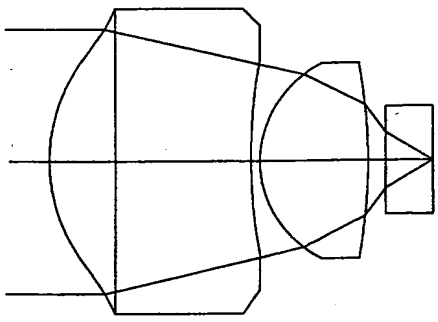


FIG. 26 (a)

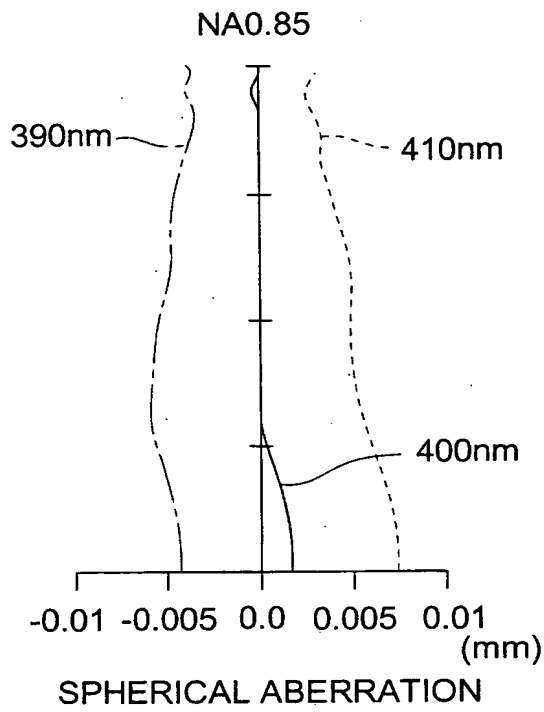


FIG. 26 (b)

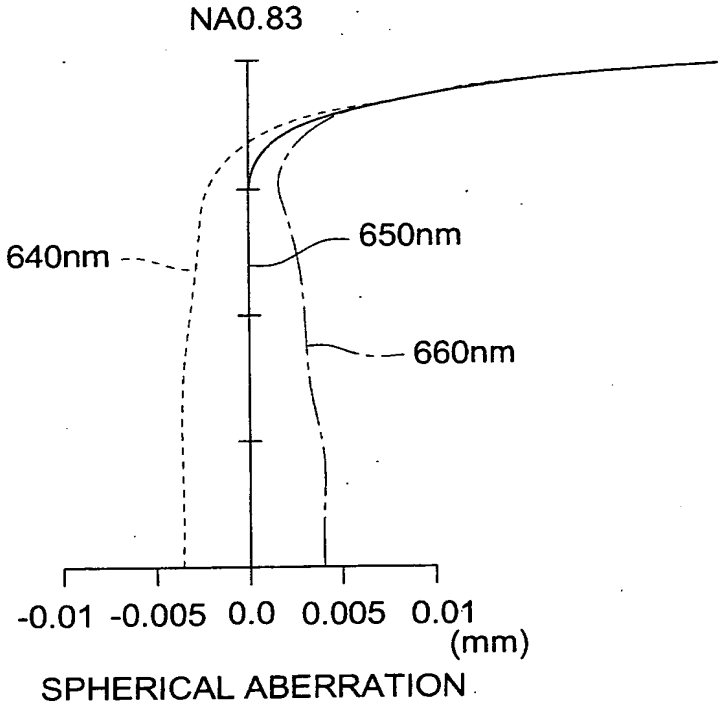


FIG. 27 (a)

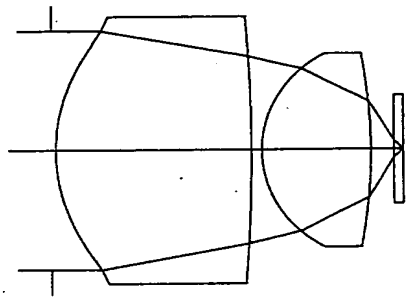


FIG. 27 (b)

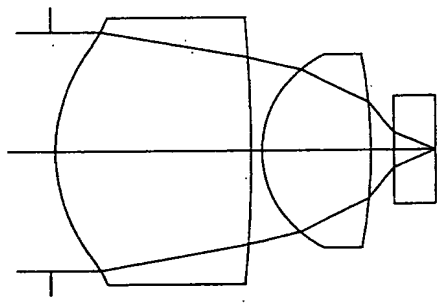


FIG. 28 (a)

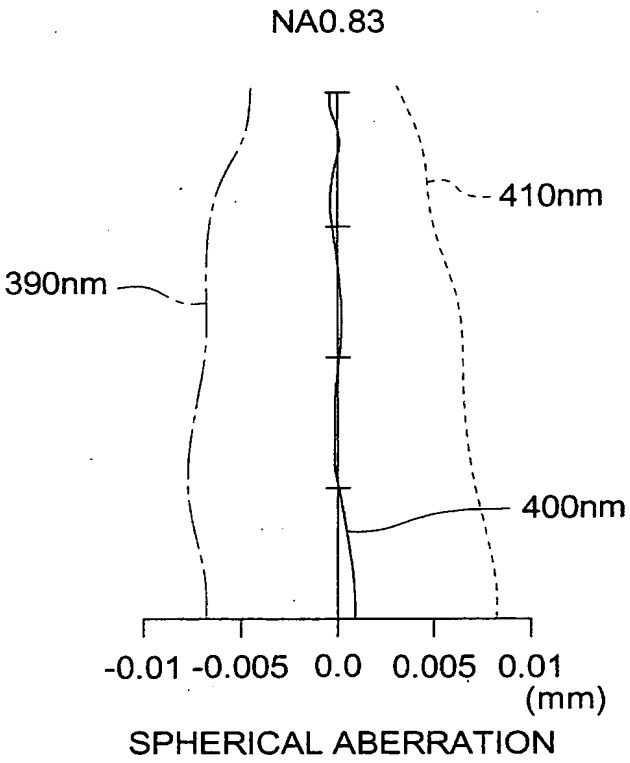


FIG. 28 (b)

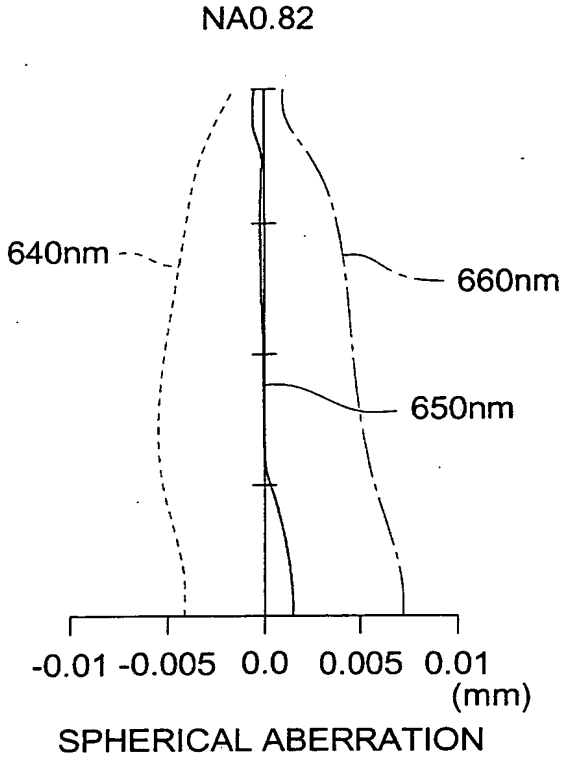


FIG. 29 (a)

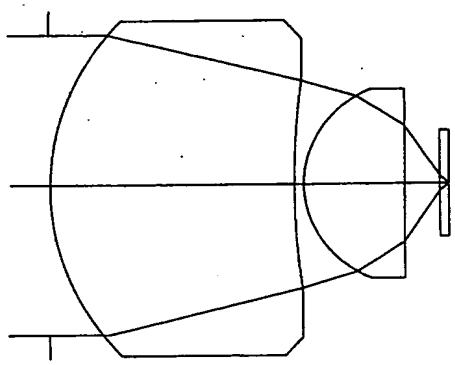


FIG. 29 (b)

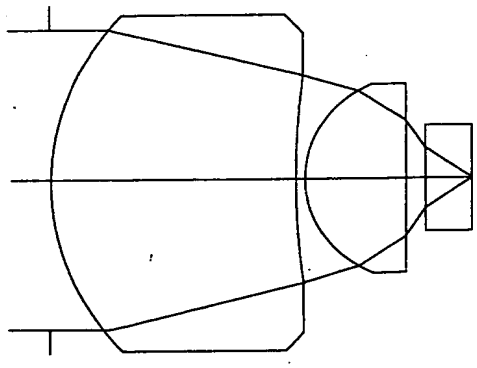


FIG. 30 (a)

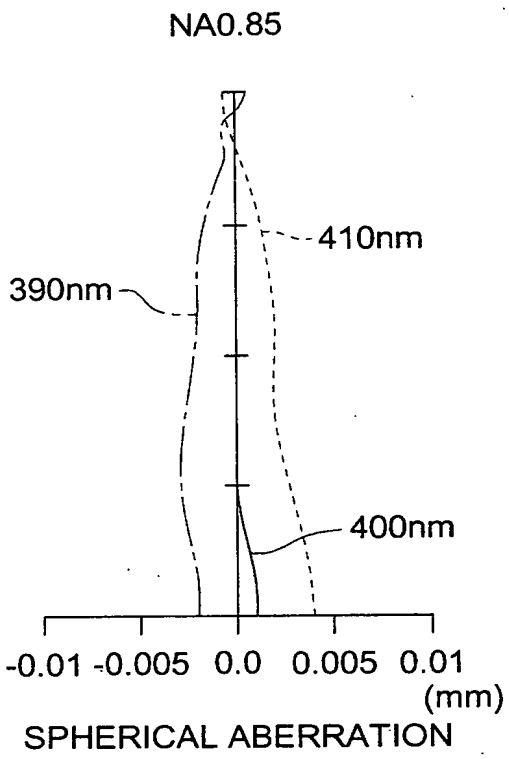


FIG. 30 (b)

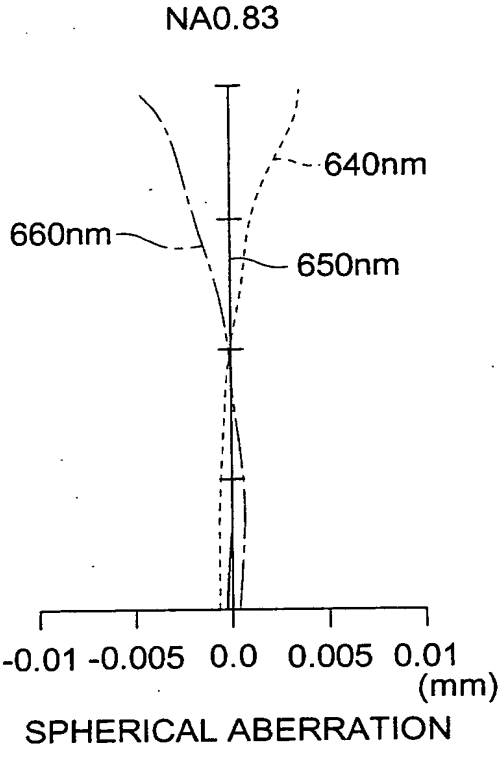


FIG. 31 (a)

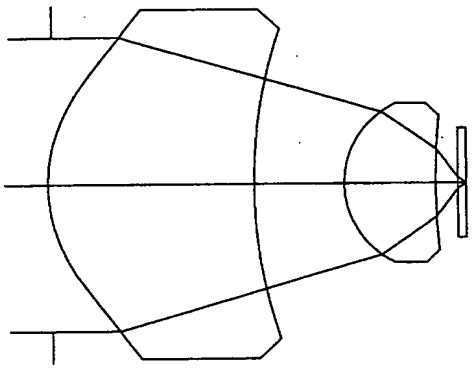


FIG. 31 (b)

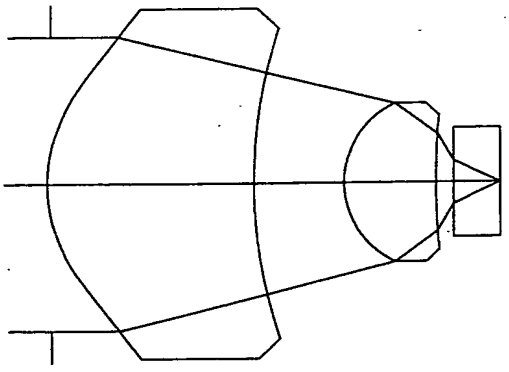


FIG. 32 (a)

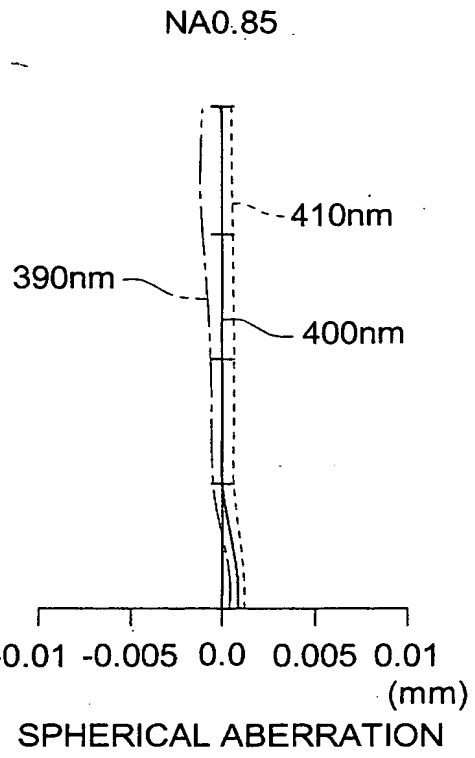


FIG. 32 (b)

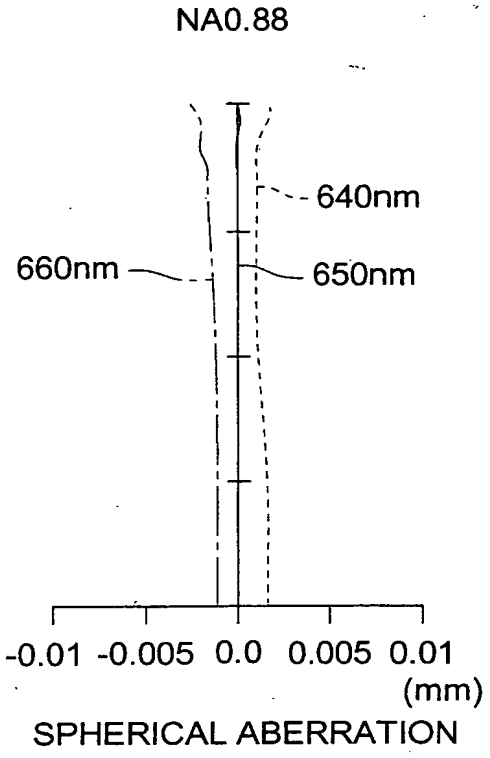


FIG. 33 (a)

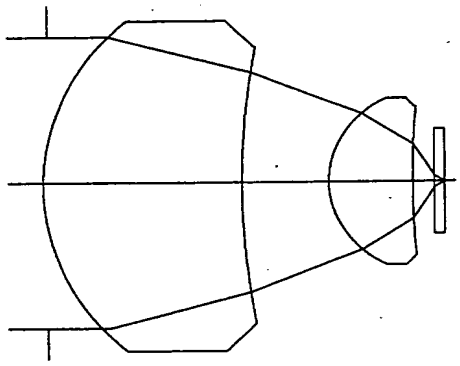


FIG. 33 (b)

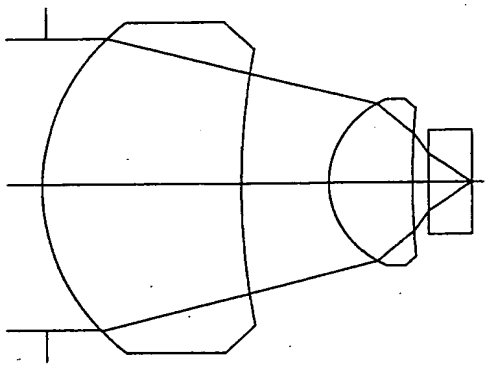


FIG. 34 (a)

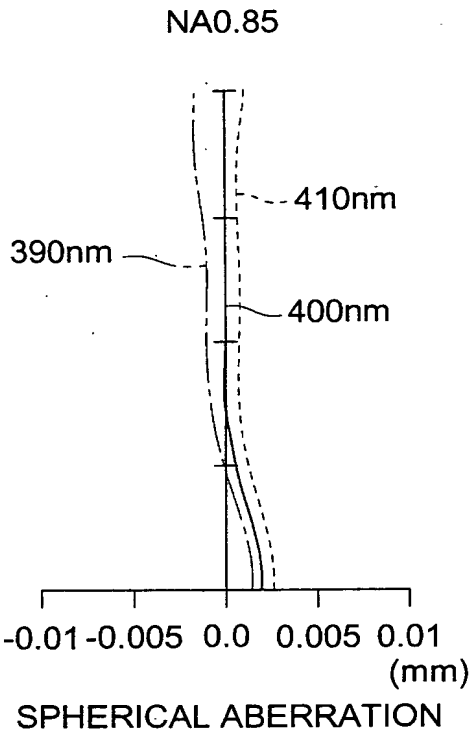


FIG. 34 (b)

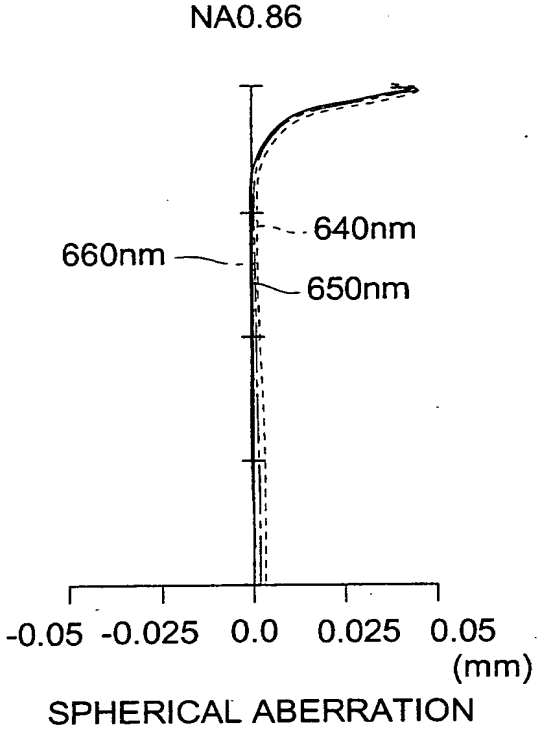


FIG. 35

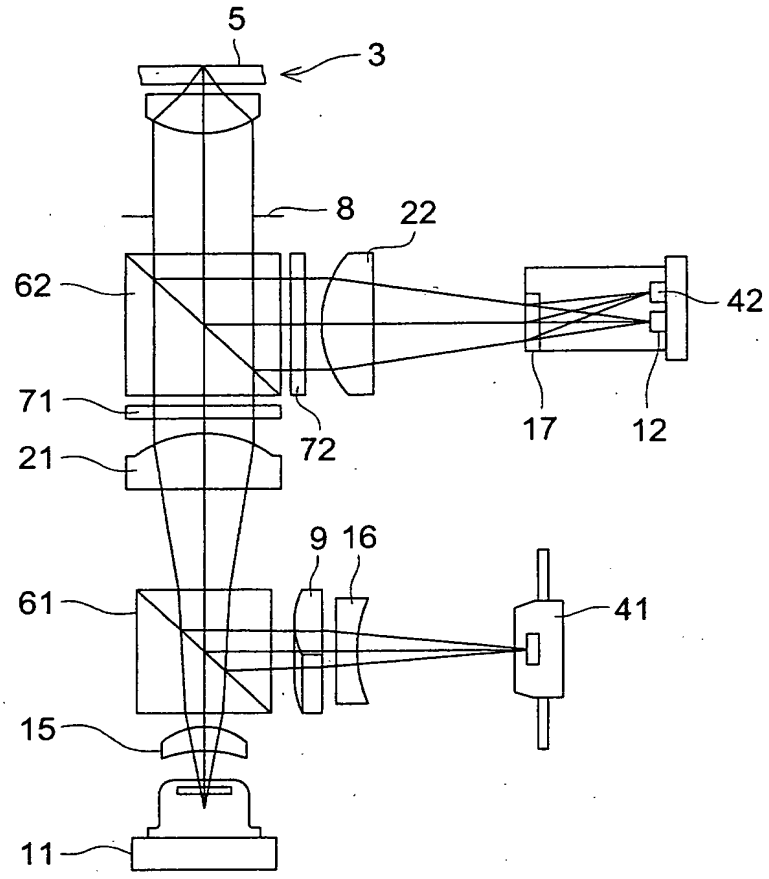


FIG. 36

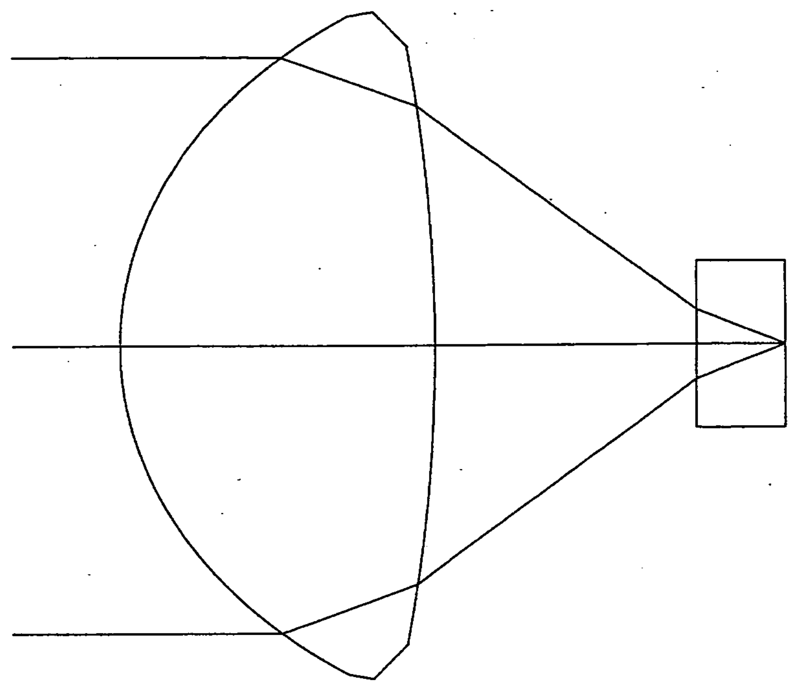


FIG. 37

DVD ABERRATION VIEW

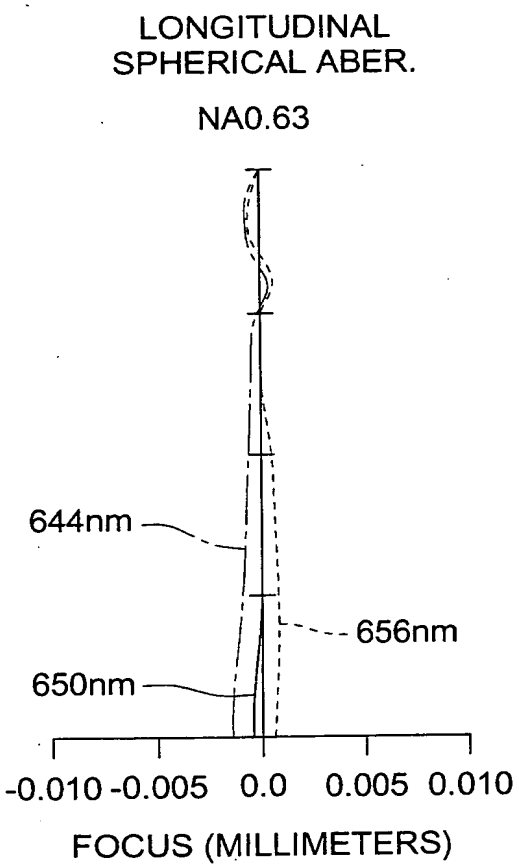


FIG. 38

CD ABERRATION VIEW

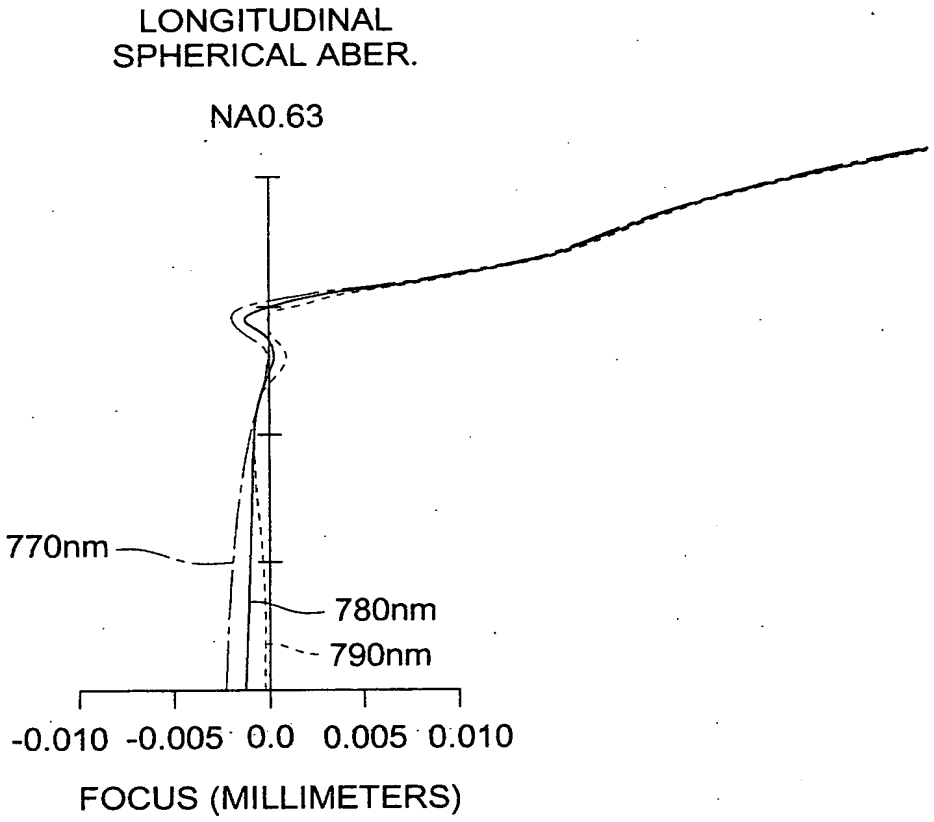


FIG. 39

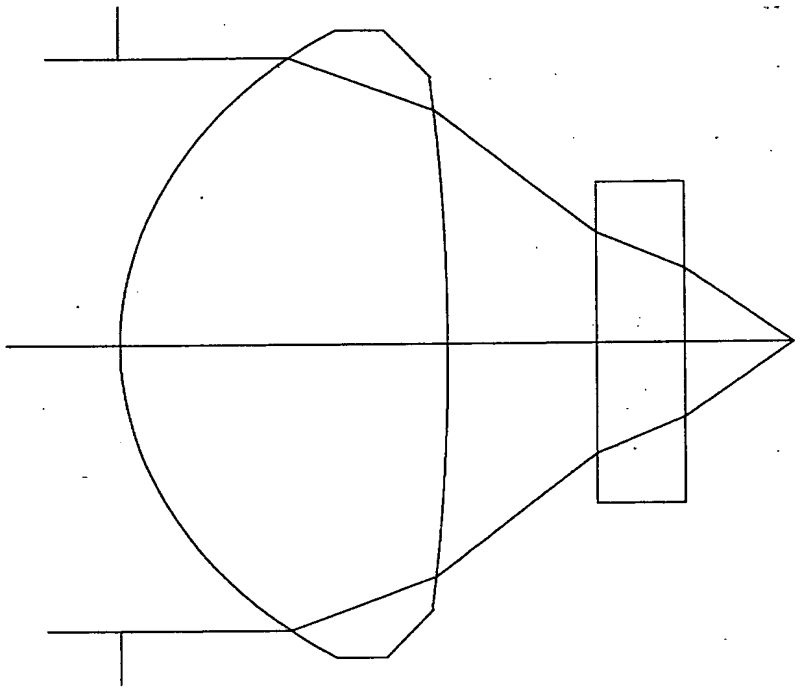


FIG. 40

DVD ABERRATION VIEW

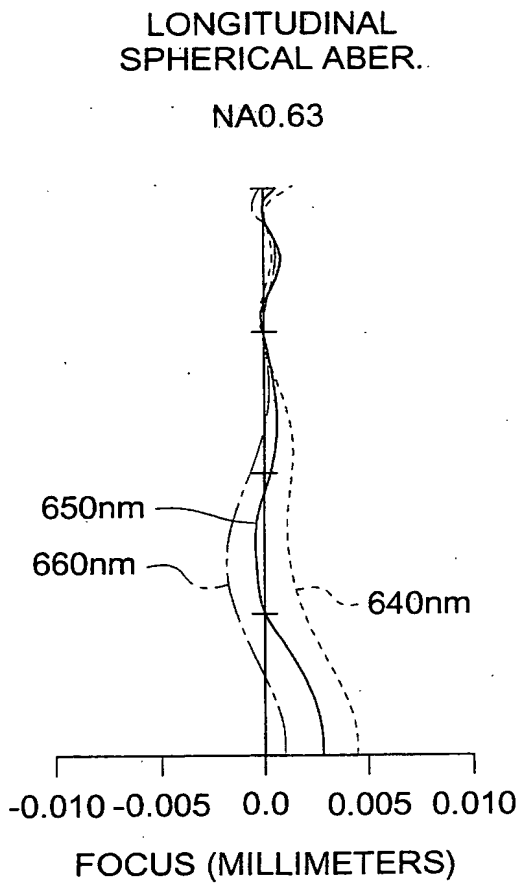


FIG. 41

CD ABERRATION VIEW

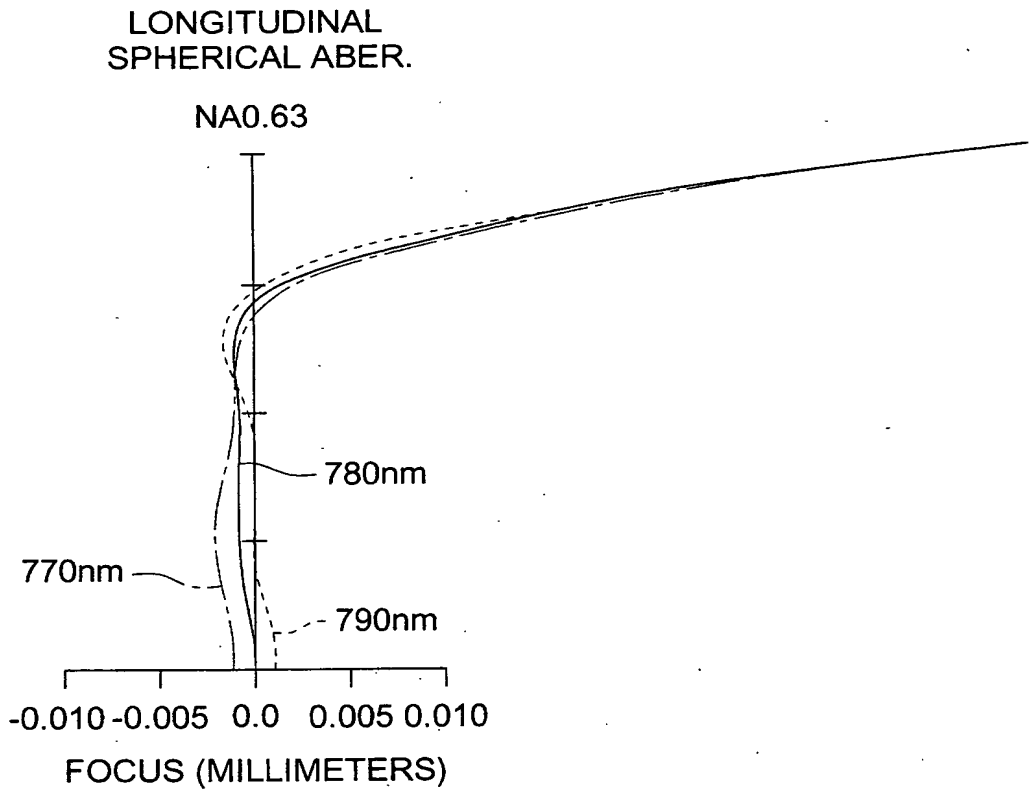


FIG. 42

SPOT DIAGRAM OF LUMINOUS FLUX (NA 0.5 - 0.63) OF DVD EXCLUSIVE-USE AREA WHEN SECOND DEGREE DIFFRACTION LIGHT IS USED

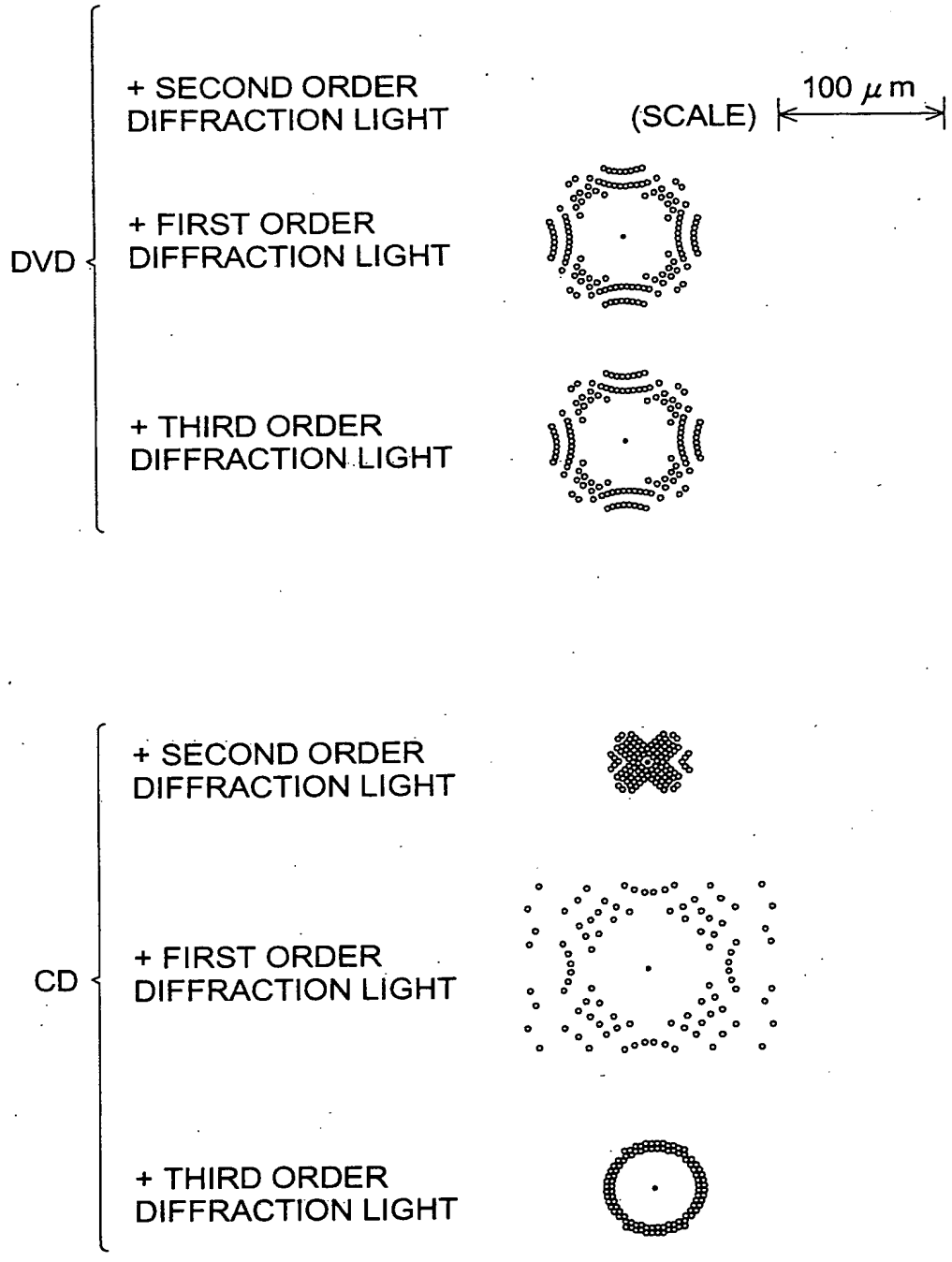


FIG. 43